

# **RESEARCH PARKWAY DEMONSTRATION PROJECT**

## **December 2016 Three Month Report**

The Research Parkway Demonstration Project was implemented on September 27, 2016. The project consisted of restriping Research Parkway from Chapel Hills Drive to Austin Bluffs Parkway from a 6 lane configuration to a 4 lane configuration with buffered bike lanes. Existing acceleration lanes were closed using flexible delineators to bring all turning movements to the intersection. Acceleration lanes are a highway design application accommodating higher travel speeds. Such lane reduction projects have become common across the United States and have the advantage of slowing excessive speeds as well as allowing the City to provide the accompanying bike facilities. Traffic Engineering Staff identified Research Parkway as a good candidate for this type of treatment as it exhibited high travel speeds, had a daily and hourly traffic volume that was more appropriate for a four lane facility, and was identified as one of the primary corridors to develop for bicycling in northern Colorado Springs.

Prior to a scheduled 2017 Research Parkway Overlay, the demonstration project was initiated so staff could study the impact on travel speeds, accident rates, as well as bicycle usage to determine if the roadway configuration should be changed permanently. This report summarizes our findings after three months of use and recommends future changes.

### **Vehicle Operating Speeds**

Vehicle speeds are usually studied with single point speed studies that record a vehicle speed at one location along a roadway. These studies are useful for comparing the operating speed with the posted speed of a roadway at a single point; typically between signalized intersections.

For this study Traffic Engineering examined the travel speed over an entire corridor. We have several programs available that measure the average speed for a designated corridor such as INRX and PC Travel. The Research corridor was tested for travel speed in October of 2015. The results showed an average travel speed of 34 mph eastbound and 35 mph westbound. Please note that although the travel speeds are less than the posted speed limit of 45 mph that does not mean that speeds between signalized intersections were at or below the posted speed. The average travel speed includes stop time at signalized intersections and reduced speeds for turning vehicles.

Changes in roadway operations are typically reviewed over a six month period to allow traffic to normalize. In this instance, staff wanted to assess speeds early given the amount of interest in the project. In October, data was collected using PC Travel to analyze travel speeds to assess the actual change on the roadway. The analysis for the AM and PM peak hour analysis indicate travel speeds were slightly higher than the same time periods in 2015. These results did not show improvements intended with the project and are not consistent with national published studies on speeds related to lane reductions.

## **Average Speed Comparison Before/After Research Parkway Implementation**

<b>Research Parkway</b>	<b>October 2015</b>	<b>October 2016</b>
AM Peak Average Speed	32	35
Noon Peak Average Speed	33	31
PM Peak Average Speed	35	42

"Before" Analysis Based on INRX data

"After" Analysis Based on PC Travel Runs

## **Accident Summary**

Accident rates should not typically be compared over a short period of time. It is not unusual to see a cluster of accidents over short periods of time that are not statistically meaningful. Even though a three month period may not be relevant for accident analysis, we have provided an accident summary of Research Parkway over the last five years. Between 2012 and 2015 the average number of accidents was 51.5 accidents per year. Just over six injuries occurred per year on average, and no fatalities have occurred since 2012. For the last quarter of each year (October through December) the average number of accidents was 13.5 or 26% of the yearly accidents.

As of December 22, 2016 the total number of accidents on Research was 44. Five accidents have occurred since the restriping. This represents 11.5% of the accidents from 2016. While this number has decreased slightly, it is not significant when considering the short time period for analysis.

## **Bicycle Usage**

Due to the winter conditions present during the test period, bicycle counts on the new bike lanes have not been taken. A number of bike events have been held on weekends to introduce cyclists to the new lanes and a small increase in weekday commuter bike usage has been anecdotally observed by staff. However, even during mild fall weather, the lanes did not get significant use.

## **Public Input**

Public input has been strong since Research Parkway was restriped at the end of September. The City has received numerous emails, letters and phone calls, with a significant majority expressing opposition to the project. The public also provided feedback through an on-line survey site (Speak-Up). Over 1,300 people answered the survey, with 80.5% wanting the project reversed.

## **Recommendations**

Due to the lack of identifiable speed reduction or safety results, and the overwhelming public opinion against this project, staff is recommending the demonstration project be ended when feasible. Removal of the bike lane will require grinding and repainting of the third lane. This work will require a reasonable period of warm weather to complete. A speeding and aggressive driver problem still exists on Research Parkway. Increased enforcement is recommended for Research to better control these problems. There is also a lack of bike facilities in the northeast part of Colorado Springs. The Bike Master Plan should address the need and type of bike facilities that would be useful in the Briargate area.

## **Lessons Learned**

Although staff is not recommending a continuation of this demonstration project, it has provided some valuable lessons that we can use in future projects. These lessons include:

- Study effectiveness of public meeting notifications to include on-street advertising, public outreach via HOA meetings, announcements in periodic publications, and media releases.
- Street signage announcing the project which includes a website address for detailed information.
- Additional attention when removing traffic operation facilities such as acceleration lanes.
- Future demonstration projects should include delay at cross streets as a data measurement.
- Utilize the Bicycle Master Plan as a direction forward to ensure that projects are consistent with community values.

## **Study Data**

The data used to develop this report is available at the Traffic Engineering Division, Public Works Department of the City of Colorado Springs. This report and the data supporting the recommendations may be found on the project website at [www.coloradosprings.gov/rideonresearch.com](http://www.coloradosprings.gov/rideonresearch.com).

## **See attachments for project data**

1. Research – Voyager to Austin Bluffs 5-year crash summary
2. October 2015 Weekday Historic Average Speeds
3. October 2016 Weekday Historic Average Speeds- AM, Noon and PM Peak